



OIIPE

RAW SEQUENCE LISTING

DATE: 01/23/2002

PATENT APPLICATION: US/09/905,589

TIME: 14:40:45

Input Set : N:\Crf3\RULE60\09905589.raw

Output Set: N:\CRF3\01232002\I905589.raw

1 <110> APPLICANT: Chadwick, Brian Paul
 2 Frischauf, Anna-Maria
 3 <120> TITLE OF INVENTION: METHODS AND COMPOSITIONS RELATING TO CD39-LIKE
 4 POLYPEPTIDES AND NUCLEIC ACIDS
 5 <130> FILE REFERENCE: 9598-066
 6 <140> CURRENT APPLICATION NUMBER: 09/905,589
 7 <141> CURRENT FILING DATE: 2001-07-13
 9 <150> PRIOR APPLICATION NUMBER: US/09/240,639
 10 <151> PRIOR FILING DATE: 1998-01-29
 13 <160> NUMBER OF SEQ ID NOS: 29
 14 <170> SOFTWARE: PatentIn Ver. 2.0
 16 <210> SEQ ID NO: 1
 17 <211> LENGTH: 2762
 18 <212> TYPE: DNA
 19 <213> ORGANISM: Homo sapiens
 20 <220> FEATURE:
 21 <221> NAME/KEY: CDS
 22 <222> LOCATION: (232)..(1599)
 23 <400> SEQUENCE: 1

24 gtgggggtcgt atcccgcggtg tggaggccggt ggtggcgccg gccggggcggt gggagcccaa 60
 25 aagaccgggt gccgcctgct ccccggaataa gggcactcgt ctccgtgggt gtggcggtgc 120
 26 gcgcggtgca tgggaatgggc tatgtgaatg aaaaaaggta tccgttatga aacttcaga 180
 27 aaaacgagct acatttttca gcagccgcag cacggtcctt ggcaacaag g atg aga 237
 28 Met Arg
 29 1

30 aaa ata tcc aac cac ggg agc ctg cgg gtg gcg aag gtg gca tac ccc 285
 31 Lys Ile Ser Asn His Gly Ser Leu Arg Val Ala Lys Val Ala Tyr Pro
 32 5 10 15
 33 ctg ggg ctg tgt gtg ggc gtg ttc atc tat gtt gcc tac atc aag tgg 333
 34 Leu Gly Leu Cys Val Gly Val Phe Ile Tyr Val Ala Tyr Ile Lys Trp
 35 20 25 30
 36 cac cgg gcc acc gcc acc cag gcc ttc ttc agc atc acc agg gca gcc 381
 37 His Arg Ala Thr Ala Thr Gln Ala Phe Phe Ser Ile Thr Arg Ala Ala
 38 35 40 45 50
 39 ccg ggg gcc cgg tgg ggt cag cag gcc cac agc ccc ctg ggg aca gct 429
 40 Pro Gly Ala Arg Trp Gly Gln Gln Ala His Ser Pro Leu Gly Thr Ala
 41 55 60 65
 42 gca gac ggg cac gag gtc ttc tac ggg atc atg ttt gat gca gga agc 477
 43 Ala Asp Gly His Glu Val Phe Tyr Gly Ile Met Phe Asp Ala Gly Ser
 44 70 75 80
 45 act ggc acc cga gta cac gtc ttc cag ttc acc cgg ccc ccc aga gaa 525
 46 Thr Gly Thr Arg Val His Val Phe Gln Phe Thr Arg Pro Pro Arg Glu
 47 85 90 95

ENTERED

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/905,589

DATE: 01/23/2002

TIME: 14:40:45

Input Set : N:\Crif3\RULE60\09905589.raw

Output Set: N:\CRF3\01232002\I905589.raw

```

48 act ccc acg tta acc cac gaa acc ttc aaa gca gtg aag cca ggt ctt 573
49 Thr Pro Thr Leu Thr His Glu Thr Phe Lys Ala Val Lys Pro Gly Leu
50 100 105 110
51 tct gcc tat gct gat gat gtt gaa aag agc gct cag gga atc cgg gaa
52 Ser Ala Tyr Ala Asp Asp Val Glu Lys Ser Ala Gln Gly Ile Arg Glu 621
53 115 120 125 130
54 cta ctg gat gtt gct aaa cag gac att cgg ttc gac ttc tgg aag gcc
55 Leu Leu Asp Val Ala Lys Gln Asp Ile Pro Phe Asp Phe Trp Lys Ala 669
56 135 140 145
57 acc cct ctg gtc ctc aag gcc aca gct ggc tta cgc ctg tta cct gga
58 Thr Pro Leu Val Leu Lys Ala Thr Ala Gly Leu Arg Leu Leu Pro Gly 717
59 150 155 160
60 gaa aag gcc cag aag tta ctg cag aag gtg aaa gaa gta ttt aaa gca
61 Glu Lys Ala Gln Lys Leu Leu Gln Lys Val Lys Glu Val Phe Lys Ala 765
62 165 170 175
63 tcg cct ttc ctt gta ggg gat gac tgt gtt tcc atc atg aac gga aca
64 Ser Pro Phe Leu Val Gly Asp Asp Cys Val Ser Ile Met Asn Gly Thr 813
65 180 185 190
66 gat gaa ggc gtt tcg gcg tgg atc acc atc aac ttc ctg aca ggc agc
67 Asp Glu Gly Val Ser Ala Trp Ile Thr Ile Asn Phe Leu Thr Gly Ser 861
68 195 200 205 210
69 ttg aaa act cca gga ggg agc agc gtg ggc atg ctg gac ttg ggc gga
70 Leu Lys Thr Pro Gly Gly Ser Ser Val Gly Met Leu Asp Leu Gly Gly 909
71 215 220 225
72 gga tcc act cag atc gcc ttc ctg cca cgc gtg gag ggc acc ctg cag
73 Gly Ser Thr Gln Ile Ala Phe Leu Pro Arg Val Glu Gly Thr Leu Gln 957
74 230 235 240
75 gcc tcc cca ccc ggc tac ctg acg gca ctg cgg atg ttt aac agg acc
76 Ala Ser Pro Pro Gly Tyr Leu Thr Ala Leu Arg Met Phe Asn Arg Thr 1005
77 245 250 255
78 tac aag ctc tat tcc tac agc tac ctc ggg ctc ggg ctg atg tcg gca
79 Tyr Lys Leu Tyr Ser Tyr Ser Tyr Leu Gly Leu Gly Leu Met Ser Ala 1053
80 260 265 270
81 cgc ctg gcg atc ctg ggc ggc gtg gag ggg cag cct gct aag gat gga
82 Arg Leu Ala Ile Leu Gly Gly Val Glu Gly Gln Pro Ala Lys Asp Gly 1101
83 275 280 285 290
84 aag gag ttg gtc agc cct tgc ttg tct ccc agt ttc aaa gga gag tgg
85 Lys Glu Leu Val Ser Pro Cys Leu Ser Pro Ser Phe Lys Gly Glu Trp 1149
86 295 300 305
87 gaa cac gca gaa gtc acg tac agg gtt tca ggg cag aaa gca gcg gca
88 Glu His Ala Glu Val Thr Tyr Arg Val Ser Gly Gln Lys Ala Ala 1197
89 310 315 320
90 agc ctg cac gag ctg tgt gct gcc aga gtg tca gag gtc ctt caa aac
91 Ser Leu His Glu Leu Cys Ala Ala Arg Val Ser Glu Val Leu Gln Asn 1245
92 325 330 335
93 aga gtg cac agg acg gag gaa gtg aag cat gtg gac ttc tat gct ttc
94 Arg Val His Arg Thr Glu Glu Val Lys His Val Asp Phe Tyr Ala Phe 1293
95 340 345 350
96 tcc tac tat tac gac ctt gca gct ggt gtg ggc ctc ata gat gcg gag 1341

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/905,589

DATE: 01/23/2002

TIME: 14:40:45

Input Set : N:\Crf3\RULE60\09905589.raw

Output Set: N:\CRF3\01232002\I905589.raw

```

97      Ser Tyr Tyr Tyr Asp Leu Ala Ala Gly Val Gly Leu Ile Asp Ala Glu
98      355                      360                      365                      370
99      aag gga ggc agc ctg gtg gtg ggg gac ttc gag atc gca gcc aag tac      1389
100     Lys Gly Gly Ser Leu Val Val Gly Asp Phe Glu Ile Ala Ala Lys Tyr
101                      375                      380                      385
102     gtg tgt cgg acc ctg gag aca cag ccg cag agc agc ccc ttc tca tgc      1437
103     Val Cys Arg Thr Leu Glu Thr Gln Pro Gln Ser Ser Pro Phe Ser Cys
104                      390                      395                      400
105     atg gac ctc acc tac gtc agc ctg cta ctc cag gag ttc ggc ttt ccc      1485
106     Met Asp Leu Thr Tyr Val Ser Leu Leu Leu Gln Glu Phe Gly Phe Pro
107                      405                      410                      415
108     agg agc aaa gtg ctg aag ctc act cgg aaa att gac aat gtt gag acc      1533
109     Arg Ser Lys Val Leu Lys Leu Thr Arg Lys Ile Asp Asn Val Glu Thr
110                      420                      425                      430
111     agc tgg gct ctg ggg gcc att ttt cat tac atc gac tcc ctg aac aga      1581
112     Ser Trp Ala Leu Gly Ala Ile Phe His Tyr Ile Asp Ser Leu Asn Arg
113     435                      440                      445                      450
114     cag aag agt cca gcc tca tagtggccga gccatccctg tccccgtcag      1629
115     Gln Lys Ser Pro Ala Ser
116                      455
117     cagtgtctgt gtgtctgcat aaacctcct gtccctggacg tgacttcacg ctgaggagcc 1689
118     acagcacagg ccgtgctggc actttctgca cactggctct gggacttgca gaaggcctgg 1749
119     tgctgccctg gcatcagcct cttccagtcg catctggcca gagggtgtgc tggacctggg 1809
120     ccctgtctaa tgccacctgt ctgcctgggc tccaagtggg caggaccagg acagaaccac 1869
121     aggcacacac tgagggggca gtgtggctcc ctgcctgtcc catcccatg ccccgtcgc 1929
122     ggggctgtgg ctgctgctgt gcatgtccct gcatggggag tcttgtctcc cagcctgtca 1989
123     gtttctctcc cagggcagag ctcccttccc tgcaagagtc tgggaggcgg tgcaggctgt 2049
124     cctggctgct ctggggaagc cgagggacag ccataacacc cccgggacag taggtctggg 2109
125     cggcaccact gggaactctg gacttgagtg tgtttgctct tccttgggta tgaatgtgtg 2169
126     agttcaccca gaggcctgct ctctcacac attgtgtggt ttgggggttaa tgatggaggg 2229
127     agacacctct tcatagacgg caggtgcccc cctttcaggg agtctcccag catgggcgga 2289
128     tgccgggcat gagctgctgt aaactatttg tggtgtgtgt gcttgagtga cgtctctgtc 2349
129     gtgtgggtgc caagtgttg tgtagaaact gtgttctgag ccccttttcc tggacaccaa 2409
130     ctgtgtcctg tgaatgtatc gctactgtga gctgttcccg cctagccagg gccatgtctt 2469
131     aggtgcagct gtgccacggg tcagctgagc cacagtcccc gaaccaagct ctcggtgtct 2529
132     cgggccacca tccgcccacc tcgggctgac cccacctcct ccatggacag tgtgagcccc 2589
133     gggccgtgca tctgtctcag tgtggcgta gtgtcggggc tgagcccctt gagctgcttc 2649
134     agtgaatgta cagtgcctgg cactgagctga acctcatgtg ttccactccc aataaaagg 2709
135     tgacaggggc ttctccttca aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaa      2762
137 <210> SEQ ID NO: 2
138 <211> LENGTH: 456
139 <212> TYPE: PRT
140 <213> ORGANISM: Homo sapiens
141 <400> SEQUENCE: 2
142     Met Arg Lys Ile Ser Asn His Gly Ser Leu Arg Val Ala Lys Val Ala
143     1                      5                      10                      15
144     Tyr Pro Leu Gly Leu Cys Val Gly Val Phe Ile Tyr Val Ala Tyr Ile
145     20                      25                      30
146     Lys Trp His Arg Ala Thr Ala Thr Gln Ala Phe Phe Ser Ile Thr Arg

```

RAW SEQUENCE LISTING

DATE: 01/23/2002

PATENT APPLICATION: US/09/905,589

TIME: 14:40:45

Input Set : N:\Crf3\RULE60\09905589.raw

Output Set: N:\CRF3\01232002\I905589.raw

```

147          35          40          45
148 Ala Ala Pro Gly Ala Arg Trp Gly Gln Gln Ala His Ser Pro Leu Gly
149          50          55          60
150 Thr Ala Ala Asp Gly His Glu Val Phe Tyr Gly Ile Met Phe Asp Ala
151          65          70          75          80
152 Gly Ser Thr Gly Thr Arg Val His Val Phe Gln Phe Thr Arg Pro Pro
153          85          90          95
154 Arg Glu Thr Pro Thr Leu Thr His Glu Thr Phe Lys Ala Val Lys Pro
155          100          105          110
156 Gly Leu Ser Ala Tyr Ala Asp Asp Val Glu Lys Ser Ala Gln Gly Ile
157          115          120          125
158 Arg Glu Leu Leu Asp Val Ala Lys Gln Asp Ile Pro Phe Asp Phe Trp
159          130          135          140
160 Lys Ala Thr Pro Leu Val Leu Lys Ala Thr Ala Gly Leu Arg Leu Leu
161          145          150          155          160
162 Pro Gly Glu Lys Ala Gln Lys Leu Leu Gln Lys Val Lys Glu Val Phe
163          165          170          175
164 Lys Ala Ser Pro Phe Leu Val Gly Asp Cys Val Ser Ile Met Asn
165          180          185          190
166 Gly Thr Asp Glu Gly Val Ser Ala Trp Ile Thr Ile Asn Phe Leu Thr
167          195          200          205
168 Gly Ser Leu Lys Thr Pro Gly Gly Ser Ser Val Gly Met Leu Asp Leu
169          210          215          220
170 Gly Gly Gly Ser Thr Gln Ile Ala Phe Leu Pro Arg Val Glu Gly Thr
171          225          230          235          240
172 Leu Gln Ala Ser Pro Pro Gly Tyr Leu Thr Ala Leu Arg Met Phe Asn
173          245          250          255
174 Arg Thr Tyr Lys Leu Tyr Ser Tyr Ser Tyr Leu Gly Leu Gly Leu Met
175          260          265          270
176 Ser Ala Arg Leu Ala Ile Leu Gly Gly Val Glu Gly Gln Pro Ala Lys
177          275          280          285
178 Asp Gly Lys Glu Leu Val Ser Pro Cys Leu Ser Pro Ser Phe Lys Gly
179          290          295          300
180 Glu Trp Glu His Ala Glu Val Thr Tyr Arg Val Ser Gly Gln Lys Ala
181          305          310          315          320
182 Ala Ala Ser Leu His Glu Leu Cys Ala Ala Arg Val Ser Glu Val Leu
183          325          330          335
184 Gln Asn Arg Val His Arg Thr Glu Glu Val Lys His Val Asp Phe Tyr
185          340          345          350
186 Ala Phe Ser Tyr Tyr Tyr Asp Leu Ala Ala Gly Val Gly Leu Ile Asp
187          355          360          365
188 Ala Glu Lys Gly Gly Ser Leu Val Val Gly Asp Phe Glu Ile Ala Ala
189          370          375          380
190 Lys Tyr Val Cys Arg Thr Leu Glu Thr Gln Pro Gln Ser Ser Pro Phe
191          385          390          395          400
192 Ser Cys Met Asp Leu Thr Tyr Val Ser Leu Leu Leu Gln Glu Phe Gly
193          405          410          415
194 Phe Pro Arg Ser Lys Val Leu Lys Leu Thr Arg Lys Ile Asp Asn Val
195          420          425          430

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/905,589

DATE: 01/23/2002
TIME: 14:40:45Input Set : N:\Crf3\RULE60\09905589.raw
Output Set: N:\CRF3\01232002\I905589.raw

```

196      Glu Thr Ser Trp Ala Leu Gly Ala Ile Phe His Tyr Ile Asp Ser Leu
197              435                      440
198      Asn Arg Gln Lys Ser Pro Ala Ser              445
199              450                      455
201 <210> SEQ ID NO: 3
202 <211> LENGTH: 2797
203 <212> TYPE: DNA
204 <213> ORGANISM: Homo sapiens
205 <220> FEATURE:
206 <221> NAME/KEY: CDS
207 <222> LOCATION: (83)..(1669)
208 <400> SEQUENCE: 3
209      acccacgcgt ctggccgcgg gccgcctctg cggcagcgct agtcgccttc tccgaatcgg 60
210      ctccgcacag ctaggagaaa ag atg ttc act gtg ctg acc cgc caa cca tgt 112
211                      1                      5
212      Met Phe Thr Val Leu Thr Arg Gln Pro Cys
213      gag caa gca ggc ctc aag gcc ctc tac cga act cca acc atc att gcc 160
214      Glu Gln Ala Gly Leu Lys Ala Leu Tyr Arg Thr Pro Thr Ile Ile Ala
215                      15                      20
216      ttg gtg gtc ttg ctt gtg agt att gtg gta ctt gtg agt atc act gtc 208
217      Leu Val Val Leu Val Ser Ile Val Val Leu Val Ser Ile Thr Val
218                      30                      35
219      atc cag atc cac aag caa gag gtc ctc cct cca gga ctg aag tat ggt
220      Ile Gln Ile His Lys Gln Glu Val Leu Pro Pro Gly Leu Lys Tyr Gly 256
221                      45                      50
222      att gtg ctg gat gcc ggg tct tca aga acc aca gtc tac gtg tat caa
223      Ile Val Leu Asp Ala Gly Ser Ser Arg Thr Thr Val Tyr Val Tyr Gln 304
224                      60                      65
225      tgg cca gca gaa aaa gag aat aat acc gga gtg gtc agt caa acc ttc
226      Trp Pro Ala Glu Lys Glu Asn Asn Thr Gly Val Val Ser Gln Thr Phe 352
227                      75                      80
228      aaa tgt agt gtg aaa ggc tct gga atc tcc agc tat gga aat aac ccc
229      Lys Cys Ser Val Lys Gly Ser Gly Ile Ser Ser Tyr Gly Asn Asn Pro 400
230                      95                      100
231      caa gat gtc ccc aga gcc ttt gag gag tgt atg caa aaa gtc aag ggg
232      Gln Asp Val Pro Arg Ala Phe Glu Glu Cys Met Gln Lys Val Lys Gly 448
233                      110                      115
234      cag gtt cca tcc cac ctc cac gga tcc acc ccc att cac ctg gga gcc
235      Gln Val Pro Ser His Leu His Gly Ser Thr Pro Ile His Leu Gly Ala 496
236                      125                      130
237      acg gct ggg atg cgc ttg ctg agg ttg caa aat gaa aca gca gct aat
238      Thr Ala Gly Met Arg Leu Leu Arg Leu Gln Asn Glu Thr Ala Ala Asn 544
239                      140                      145
240      gaa gtc ctt gaa agc atc caa agc tac ttc aag tcc cag ccc ttt gac
241      Glu Val Leu Glu Ser Ile Gln Ser Tyr Phe Lys Ser Gln Pro Phe Asp 592
242                      155                      160
243      ttt agg ggt gct caa atc att tct ggg caa gaa gaa ggg gta tat gga
244      Phe Arg Gly Ala Gln Ile Ile Ser Gly Gln Glu Glu Gly Val Tyr Gly 640
245                      175                      180

```

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/905,589

DATE: 01/23/2002

TIME: 14:40:47

Input Set : N:\Crf3\RULE60\09905589.raw

Output Set: N:\CRF3\01232002\I905589.raw